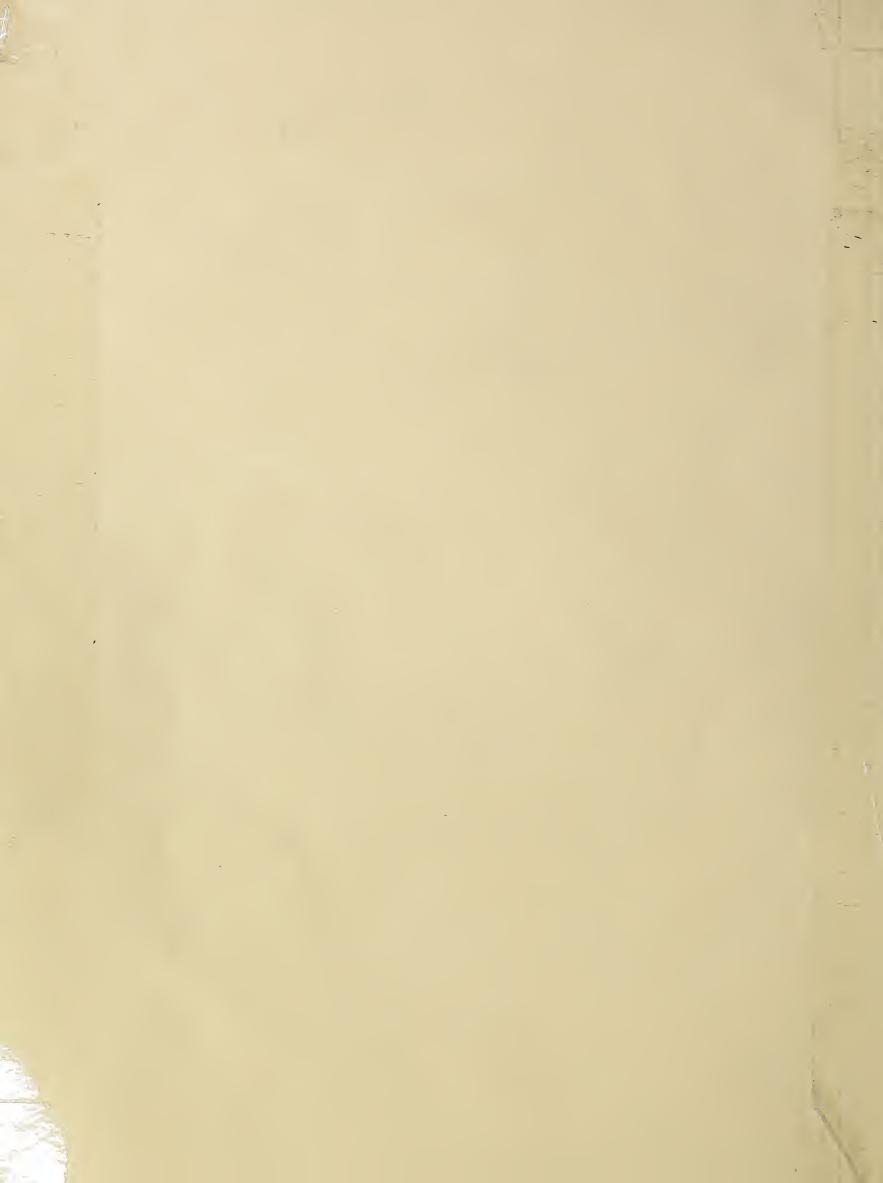
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THE FARM INDEX

ECONOMIC RESEARCH SERVICE . U.S. DEPARTMENT OF AGRICULTURE . DECEMBER 1965

MEDICARE: ITS IMPACT ON RURAL AMERICA

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also in this issue:

MECHANICAL GRAIN DRYERS:
A BUYER'S GUIDE

FORMULA FOR FEED MAKERS:
BUY BULK



economic trends

17F1	HALT OR	1964		.964	1965		
ITEM	UNIT OR Base Period	'57-'59 AVERAGE	YEAR	OCTOBER	AUGUST	SEPTEMBER	OCTOBER
Prices: Prices received by farmers Crops	1910-14 = 100 1910-14 = 100	242 223	236 238	236 233	250 224	250 224	248 220
Livestock and products Prices paid, interest, taxes and wage rates Family living items Production items	$\begin{array}{c} 1910 \cdot 14 = 100 \\ 1910 \cdot 14 = 100 \\ 1910 \cdot 14 = 100 \\ 1910 \cdot 14 = 100 \end{array}$	258 293 286 262	235 313 300 270	239 312 300 269	272 321 305 277	271 321 305 277	273 322 305 276
Parity ratio Wholesale prices, all commodities Commodities other than farm and food Farm products Food, processed Consumer price index, all items Food	1957-59 = 100 1957-59 = 100 1957-59 = 100 1957-59 = 100 1957-59 = 100 1957-59 = 100	83 — — — — —	76 100.5 101.2 94.3 101.0 108.1 106.4	76 100.8 101.5 93.8 101.7 108.5 106.9	78 102.9 102.7 99.1 106.7 110.0 110.1	78 103.0 102.7 99.5 106.7 110.2 109.7	77 103.1 102.8 99.5 107.0
Farm Food Market Basket: 1 Retail cost Farm value Farm-retail spread Farmers' share of retail cost	Dollars Dollars Dollars Per cent	983 388 595 39	1,015 373 642 37	1,022 379 643 37	1,060 420 640 40	1,051 414 637 39	
Farm Income: Volume of farm marketings Cash receipts from farm marketings Crops Livestock and products Realized gross income ² Farm production expenses ² Realized net income ²	1957-59 == 100 Million dollars Million dollars Million dollars Billion dollars Billion dollars Billion dollars	32,247 13,766 18,481 —	118 36,899 17,135 19,764 42.2 29.3 12.9	180 4,725 2,760 1,965 42.3 29.2 13.1	118 3,224 1,336 1,888	140 3,903 1,883 2,020 44.5 30.3 14.2	180 4,900 2,800 2,100 —
Agricultural Trade: Agricultural exports Agricultural imports	Million dollars Million dollars	4,105 3,977	6,347 4,082	576 348	459 319	485 354	
Land Values: Average value per acre Total value of farm real estate	1957-59 == 100 Billion dollars			135 ³ 154.9 ³	139 ⁴ 159.4 ⁴	_	_
Gross National Product ² Consumption ² Investment ² Government expenditures ² Net exports ²	Billion dollars Billion dollars Billion dollars Billion dollars Billion dollars	457.3 294.2 68.0 92.4 2.7	628.7 398.9 92.9 128.4 8.6	634.8 404.6 92.6 128.7 6.8		676.9 432.2 101.8 135.1 7.8	
Income and Spending: 5 Personal income, annual rate Total retail sales, monthly rate Retail sales of food group, monthly rate	Billion dolfars Million dollars Million dollars	365.3 17,105 4,159	495.0 21,802 5,183	498.7 21,383 5,229	532.0 23,653 5,517	545.7 23,774 5,626	540.2 23,959
Employment and Wages: 5 Total civilian employment Agricultural Rate of unemployment Workweek in manufacturing	Millions Millions Per cent	64.9 6.0 5.5	70.4 4.8 5.2	70.4 4.7 5.2	72.4 4.6 4.5	72.2 4.4 4.4	72.5 4.6 4.3
Hourly earnings in manufacturing, unadjusted Industrial Production 5	Hours Dollars 1957-59 == 100	39.8 2.12 —	40.7 2.53 132	40.5 2.53 132	40.9 2.60 144	40.8 2.63 143	41.0 2.64 144
Manufacturers' Shipments and Inventories: 5 Total shipments, monthly rate Total inventories, book value end of month Total new orders, monthly rate	Million dollars Million dollars Million dollars	28,745 51,549 28,365	37,129 62,944 37,697	36,811 61,777 37,846	40,518 65,788 40,926	40,115 66,235 41,205	

¹ Average annual quantities of farm food products purchased by urban wage-earner and clerical-worker households (including those of single workers living alone) in 1960-61—estimated monthly. ² Annual rates seasonally adjusted third quarter. ³ As of July 1. ⁴ As of March 1. ⁵ Seasonally adjusted.

Sources: U.S. Dept. of Agriculture (Farm Income Situation, Marketing and Transportation Situation, Agricultural Prices, Foreign Agricultural Trade and Farm Real Estate Market Developments); U.S. Dept. of Commerce (Industry Survey, Business News Reports, Advance Retail Sales Report and Survey of Current Business); and U.S. Dept. of Labor (The Labor Force and Wholesale Price Index). It has been quite a year for agriculture. Farm income stands the highest in over a decade; farmers are harvesting the largest crop on record; and a significant new farm bill has been enacted.

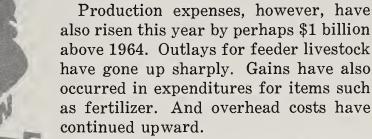
Realized net farm income this year, an estimated \$14 billion, is up more than \$1 billion from 1964 and is the highest since 1952. This results mainly from price and income gains for livestock and livestock products.



Meat animal prices have been an estimated 15 per cent above the relatively low prices of 1964. Farm prices for broilers have been higher despite increased marketings. And wholesale milk prices have also averaged higher.

Livestock and livestock product receipts may total some one and three-quarter billion dollars above last year. Crop receipts have been about steady with 1964, with little change in the average of prices or the total marketing volume.

Including the larger direct government payments to farmers this year—perhaps one-quarter billion dollars above 1964—realized gross farm income totals about forty-four and a quarter billion dollars, the highest level on record.



What does all this look like for the average farm? With a continued decline in farm numbers, realized net farm income this year is going over \$4,100 per farm. This is a record high, up from \$3,727 last year and 40 per cent above 1960. A substantial rise is also indicated in disposable personal income per capita of the farm population, with income gains both from farm and

The crop harvest this year is record large due to sharp advances in yields per acre from the drought-depressed levels in 1964. With virtually no change in crop acreage, output of food and fiber this year is estimated around 7 per cent above 1964 and $4\frac{1}{2}$ per cent above the previous high in 1963.

nonfarm sources.

Some production increases over last year are: nearly 16 per cent for feed grains, 22 per cent for soybeans and 25 per cent for the important fall potato crop. The 1965 wheat crop is up about 5 per cent and the hay crop 6 per cent. And another big cotton crop is being harvested. Among the major commodities, smaller production is indicated only for sugar crops and tobacco.

Carryover stocks of grains have been reduced materially in recent years. Limitations on wheat output and expanded use, particularly for livestock feeding and for export, reduced the carryover from some 1,400 million bushels in 1961 to 819 million this year. A further cut of possibly 70 million bushels or more is indicated at the end of the 1965/66 marketing year.

The feed grain carryover was reduced from



nearly 85 million tons in 1961 to 55 million in 1965. Although use is expected to increase in 1966, this fall's big crop may push the carryover to around 58 million tons by next October.

In contrast, cotton production continues to exceed utilization. Stocks of upland cotton rose by nearly 2 million bales to 14 million last August. A small increase in domestic use is expected in the 1965/66 marketing year, but exports may be down slightly. And 1965's large crop will raise the season-end carryover perhaps another 2 million bales.

As the larger 1965 crops began moving to market, prices declined. Soybean prices in October were down 9 per cent from a year earlier; cotton, 5 per cent; and corn, about 4 per cent. Prices received for potatoes averaged about a fourth lower and orange and grapefruit prices were down to about half the high levels of October 1964.

Crop prices probably will continue into 1966 at levels below this year's average. And cash receipts from crop marketings are expected to be somewhat reduced. But with increased government payments to participants in major farm programs, total returns from crops are expected to be larger than in 1965.

The Food and Agriculture Act of 1965 was signed into law this fall. It has a major impact on the outlook for 1966. Possibly the most important change in the law is the shift for cotton to a program similar to those for grains. The Act aims market price supports for grains and cotton toward world price levels, enabling these goods to compete more effectively without the need for heavy export payments. The impact of lower prices on farm income will be offset by more emphasis on direct payments to cooperators.

The Act authorizes a Cropland Adjustment Program designed to supplement commodity acreage diversion programs by offering long-term contracts with lower payment rates than necessary for one-year programs. It also provides for more recreational facilities and open space, assistance in adjusting resources to profitable nonfarm activities, and incentives to

encourage farmers to share their land and water facilities with others.

For 1966 a further gain of one-quarter to one-half billion dollars in realized net farm income is expected, based on expanding markets, the continued bright outlook for livestock and the new farm program. Realized net income per farm will go higher and the farmer's financial position should be further strengthened next year.

For the consumer this adds up to a smaller increase in food spending than this year's 6 per cent rise, pointing to a slight drop in the share of his dollar going for food. He will likely face slightly higher prices for red meats but lower prices for poultry, potatoes and fresh fruits and vegetables.

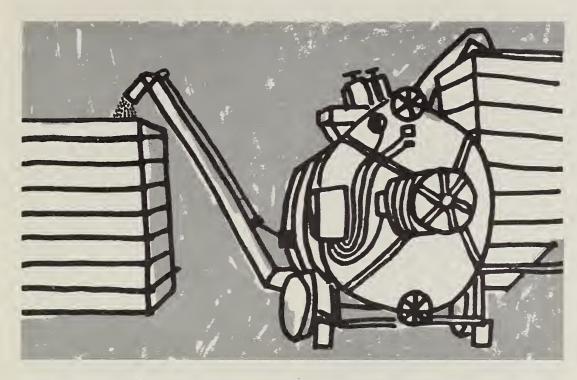
Exports to Hit New Record in 1965/66:

U.S. agricultural exports for fiscal 1965/66 likely will total \$6.2 billion, up from the past year's record of \$6.1 billion. This is a continuation of the trend in the past few years when higher agricultural exports have increasingly outpaced relatively stable imports, adding important strength to the favorable balance of U.S. total trade.

During the first quarter (July through September) the value of shipments was 7 per cent above the \$1,394 million a year ago. Exports of feed grains, rice, fruits, vegetables and hides and skins were up significantly, more than offsetting a decline in shipments of cotton.

Greater commercial sales of farm goods for dollars in 1965/66 are expected to more than compensate for a slight drop in government programs. Commercial exports are estimated to be around \$4.6 billion this year, compared with \$4.4 billion for fiscal 1964/65.

Mostly responsible are expected increases in shipments of feeds, grains, wheat, tobacco, soybeans, fruits, variety meats and hides and skins. These gains are largely due to strong demand, particularly in Western Europe and Japan. In contrast, government-financed exports are expected to total \$1.6 billion in 1965/66, compared with \$1.7 billion during the last fiscal year.



MECHANICAL GRAIN DRYERS: A BUYER'S GUIDE

When selecting a drying system for shelled corn, a farmer needs to consider rates and capacities as well as costs.

Shopping for a farm drying system for shelled corn? Here's a guide for figuring the costs of several alternative systems. These estimates have been worked out by economists in ERS and the Illinois Agricultural Experiment Station primarily for farmers in the Corn Belt. But they can be useful for farmers in other areas, too.

In-storage drying. For drying volumes of 4,000 bushels or less, an in-storage system with natural air is just about the best possible choice for farmers in terms of cost. The grain is stored in the drying bin itself; investment costs are low since little equipment is needed. Operating costs are also low since the grain is dried with the heat from the natural air.

However, in-storage drying is one of the slowest methods of drying corn. It also requires considerable know-how to dry grain properly. And it can be risky in wet years if the moisture content of the corn is high. Moisture content of corn to be dried using the heat from natural air must be 20 per cent or less.

Basic equipment costs run about \$375 for a 16-inch drying fan and 3-horsepower motor; \$500 for a 20-inch fan and 5-horsepower motor. A grain probe and thermometers are essential. And if a farmer plans to layer-dry his corn with either the in-storage or the batch-in-bin systems, he'll have to invest in a grain distributor, too.

Supplemental heat units (costing about \$300 each) reduce the risk of in-storage drying during wet weather, speed up the drying process and permit farmers to dry corn with moisture as high as 25 per cent. With an annual output of 5,000 to 10,000 bushels, supplemental heat units might well be worth the extra expense.

Per bushel operating costs (for fuel, electricity and labor) for instorage systems using supplemental heat average around 2.5 cents per 10 percentage points of moisture content removed. However, these in-storage operating costs vary from year to year depending on weather.

Batch-in-bin drying. With this system farmers can dry corn

faster yet enjoy the economy of drying and storing the grain in the same structure. Investment in equipment is fairly low—the drying bin, equipped with perforated floor, fan and heater, is used to batch-dry corn until all storage bins are filled. The drying bin then becomes a storage bin by use of the layer drying technique.

Farmers with annual corn production of 8,000 bushels or more, or farmers who wish to dry corn with moisture content as high as 30 per cent, might find this system preferable to in-storage drying.

Operating costs for batch-inbin drying are slightly higher than for in-storage—about 3 cents per bushel for every 10 percentage points of moisture removed.

Batch drying. A farm batch dryer is usually a portable unit mounted on skids or wheels. While drying is greatly speeded up, investment costs are substantially higher than for in-storage or batch-in-bin systems. A 250bushel batch dryer with a power take-off (PTO) drive may cost \$3,000 and have a drying capacity of about 75 bushels per hour. A 375-bushel dryer with liquefied petroleum (LP) gas burner and PTO drive will range in cost from \$4,000 to \$5,000. Larger dryers cost \$5,000 up.

Other necessary equipment in a batch dryer setup includes an LP gas fuel tank, \$225 to \$300; a moisture tester, \$40 to \$150; and additional wiring, fuse and switch boxes, \$100 to \$200. Some batch dryers are designed to operate automatically but these are higher in cost. And with a batch system, farmers also have to invest in conveying equipment and some type of storage facilities.

Operating costs for a batch dryer with PTO drive run about 3.5 cents per bushel for every 10 percentage points of moisture removed. Moisture removals above and below this point cost about 0.3 cent per bushel more or less. Batch dryers with electric motors

operate at about 3 cents per bushel for every 10 percentage points of moisture removed.

Continuous-flow drying. For farmers with 13,000 to 15,000 bushels in annual corn output, continuous flow is the most rapid and least costly method of drying. With this system, wet grain is added to the top of a drying column and dry grain is discharged at the bottom. Farmers must invest in fairly high-powered equipment as well as conveying equipment and separate storage facilities. Per bushel operating costs run about 3 cents for every 10 percentage points of moisture removed.

Above 15,000 bushels, costs of batch, continuous flow and batch-in-bin are not significantly different. The choice of a farm drying system at these larger volumes depends not on cost but rather on how well the drying method fits in with the farm operation, labor supply and equipment and structures already on the farm. (1)

Farm Assets, Equities, Debts Climb; Inventory Levels Drop During 1964

If all farms in America were part of one vast business operation, this is what the company's balance sheet would look like for 1964:

—The value of farm assets at \$237.6 billion was up \$8.7 billion, or nearly 4 per cent, on January 1, 1965, compared with a year earlier. Farm debts, including price-support loans of the Commodity Credit Corporation (CCC), rose \$2.6 billion. Equities of farmers and other owners of farm property increased \$6.1 billion in 1964.

Rising prices of farm real estate were primarily responsible for the increase in value of farm assets and farm equities.

—Realized net farm income of farm operators rose to \$12.9 billion in 1964, compared with \$12.5 billion in 1963. Cash receipts from marketings and government payments combined were up more than \$100 million from 1963. Operators' expenses were down about \$300 million, due mainly to lower prices for feeder cattle.

Farmers reduced inventories in 1964, largely because of a cutback in production of hogs and feed grains and increased exports. When realized net farm income is adjusted for this change in inventories (valued at average prices for the year), total net income was \$12.1 billion, down \$1 billion from 1963.

—Farm debts, excluding CCC loans, increased about \$3 billion during 1964, totaling \$36 billion by the end of the year. The increase in farm real estate debt—\$2.1 billion—was a record. But the \$0.9 billion increase in nonreal estate farm debt was less than in 1962 or 1963.

The rapid growth of farm debt since World War II has resulted chiefly from the enlargement and improvement of farms and the increased investments. (2)

New Year, New Law for Farm

While 1965 is producing a better income for farmers than any year since 1952, expectations are 1966 will provide even further gains.

With the new farm program playing a key part in the outlook for next year, a review of the main provisions of the program is in order. A change in the design of the program is leading to reduced outlays for Commodity Credit Corporation (CCC) operations and price support activity and to prices around world levels. The program also provides for increased outlays of direct payments to maintain farm income.

For example, the Food and Agriculture Act of 1965 reduces price support loan rates for cotton to competitive world price levels. Larger direct payments offset the effect of the lower loan rates on income to cotton farmers. The program also largely eliminates payments to domestic cotton users and to exporters of cotton and wheat.

For the 1966 cotton crop the price support loan level will be

reduced to 21 cents a pound, compared with 29 cents for 1965.

Stocks of upland cotton on August 1, 1965, were 14 million bales, up nearly 2 million bales from a year earlier. Though utilization may rise slightly in 1965/66, a further sharp rise in the cotton carryover is indicated for 1966. The farm bill is expected to reduce cotton acreage for the 1966 crop from 13.6 million acres for harvest this year.

For wheat, the new bill continues the voluntary certificate type program for the 1966-69 crops. The program for 1966 will be similar to the present program. Price support loans, at a national average of \$1.25 per bushel for the 1966 crop, will be offered to producers who comply with their allotments. Marketing certificates, valued at the difference between the loan level and the parity price, will be issued to participating farmers on about 45 per cent of normal production.

Parity was \$2.56 per bushel in October 1965, but could change by the time the official determination must be made in June 1966.

Domestic food processors will be required to purchase certificates valued at 75 cents per bushel, the same as in 1965/66; the remainder of the certificate value to be met with government funds.

The outlook for feed during the next four or five years will also be conditioned by the 1965 bill. The program, like those of the past five years, gives the Secretary of Agriculture more latitude in determining its provisions.

The Secretary is also authorized to permit substitution between wheat and feed grains and the planting of certain crops on diverted acreage without loss of price support payments.

The Cropland Adjustment Program, authorized by the farm bill, supplements commodity acreage diversion programs. Specific incentives are provided to encourage farmers to share their land and water facilities with town and city people. At the same time, the program is designed to divert cropland through programs offering long-term contracts with lower payment rates than necessary for 1-year programs. (3)

Colorado Farmers Benefit in Myriad Ways From Supplemental C-BT Water

C-BT water is just plain old H₂O, but on farms in northeastern Colorado it helps crop acreage expand, yields increase and farmers earn more money.

Economists in ERS and at the Colorado Agricultural Experiment Station recently interviewed 150 farmers in northeastern Colorado who received supplemental water from the Colorado-Big Thompson Transmountain Water Diversion Project (C-BT). The purpose of the study was to find out what use was being made of C-BT water and what effect it has had on land use, cropping patterns, yields, fertilizer use and capital improvements.

Of course, not all of the changes mentioned in the study can be directly associated with the C-BT project. But these changes do illustrate the types of effects expected from the increased availability of water in the West.

Average acreage increased. Between the early 1950s (before C-BT water was available) and 1961, the average acreage on all farms increased by about 14 acres. Irrigated crop acres rose by about 17 acres. Some of the increase in irrigated land resulted from farm expansion. The rest came from cropland that had not

Win, Place and Show

Which state sells the most farm products? California does, with cash receipts of \$3.6 billion in 1964. Iowa and Texas were the runners-up, with \$2.7 and \$2.3 billion, respectively. California was also first for cash receipts from all crops, but took second place to Iowa for all livestock and livestock products.

The same states had the biggest production expenses, too. California's farms ran up a total of \$2.7 billion for the year; Iowa, \$2.2 billion; Texas, \$1.8 billion. (5)

PLOW: How much does using it cost? If you'd like to figure the tab, here's the method. Depreciation is estimated as for income taxes. Allowances are made for repairs, shelter, insurance, taxes and interest. The total is divided by the number of acres plowed annually to get a cost per acre. Tractor costs (they ranged from \$1.98 to \$2.76 an hour in the same 1960 northeastern Colorado wheat farms from which all the figures were taken) must be calculated and added to get a true picture of the expense of the operation. (See August 1965 Farm Index for tractor table.) (6)



Size (number of bottoms— inches per bottom)	4 - 14	5 - 16
Cost when new	\$613	\$902
Investment in 1960	\$337	\$496
Acres of use annually	91	139
Annual fixed costs:		-
Depreciation 1	\$14.15	\$42.73
Repairs	22.42	34.25
Shelter, insurance, taxes	7.04	9.93
Interest ²	26.96	39.68
Total	\$70.57	\$126.59
Per hour	\$.77	\$.91
Tractor size in bottoms	3 or 4	4, 5 or 6
Hours per acre	0.5 - 0.4	0.4, 0.3-0.3

¹ The cost when new minus 10 per cent—the remainder divided by estimated years of use. ² Eight per cent.

been irrigated before or from previously uncultivated grassland.

Rates of water application rose. In addition to irrigating more acres, farmers applied more water to all crops grown, especially row crops and alfalfa. The largest increase in water application was on alfalfa, up 10.5 inches per acre; corn was second with 9.6 inches.

Higher value crops produced. In general farmers switched to intensive row crops with highwater requirements; away from low-value, short season crops. Acreages of corn, sugar beets, dry beans, irrigated pasture and alfalfa all increased. Fewer farmers planted wheat and barley after C-BT water became available.

Twice as many farmers fertilized. Before C-BT water, only 42 per cent of the farmers interviewed were using some fertilizer; by the 1960s, 91 per cent were fertilizing. Average acreage fertilized rose from 53 to 88.5 acres in 1961 and most farmers were using heavier applications of fertilizer per acre as well.

Some of this increase can be

attributed to farmers becoming more aware of the value of fertilizer. But the availability of supplemental water, multiplying the benefits of fertilizer, played an important part, too.

Crop yields up. Yield increases were reported on all crops grown after C-BT water became available and fertilizer use increased.

Capital improvements made. Nearly two-thirds of the farmers receiving C-BT water had made improvements on their farms and equipment as a result of supplemental water. New investment in irrigation systems and in irrigated land improvements averaged about \$5,000 per farm reporting. New investment in machinery stemming from expanded acreage and changes in cropping patterns after C-BT water averaged around \$7,000.

Risk in farming reduced. By doubling or tripling storage water supplies in most of the study areas, C-BT water helped insure against large-scale crop failures when local irrigation water was abnormally short. (4)

	SC	CIAL SECURITY	TAX RATES WO	N'T INCREASE	MUCH MORE WI	TH MEDICARE		
		Self-employed farmers			Farm wage workers 1			
	Before 1965 Under 1965 amendments			Before 1965 amendments,	Under 1965 amendments			
Calendar year	OASDI ² only	OASDI	Basic hospital	Total	OASDI only	OASDI	Basic hospital	Total
		Per cent of t	taxable income			Per cent of ta	xable income	
1965	5.4	5.4	7 0 -	5.40	3.625	3.625	_ " " ",";	3.625
1966	6.2	5.8	0.35	6.15	4.125	3.85	0.35	4.20
1967	6.2	5.9	0.50	6.40	4.125	3.90	0.50	4.40
1968	6.9	5.9	0.50	6.40	4.625	3.90	0.50	4.40
1969-72	6.9	6.6	0.50	7.10	4.625	4.40	0.50	4.90
1973-75	6.9	7.0	0.55	7.55	4.625	4.85	0.55	5.40
1976-79	6.9	7.0	0.60	7.60	4.625	4.85	0.60	5.45
1980-86	6.9	7.0	0.70	7.70	4.625	4.85	0.70	5.55
1987 and later	6.9	7.0	0.80	7.80	4.625	4.85	0.80	5.65

The Social Security Amendments of 1965 liberalize benefits for retired people, disabled workers, widows and students. Perhaps most important to most people are the hospital and medical plans that make up Medicare.

MEDICARE: ITS IMPACT ON RURAL AMERICA

Farm families and other rural residents, perhaps more than any other group in the nation, stand to benefit from Medicare.

First, rural Americans will benefit more than most because a larger percentage of them are older than city residents. Today some 2.5 million farm people, 19 per cent of the total 13 million farm population, are either 65 or older or in the 55-64 age group that will qualify for Medicare within 10 years. Another 7.5 million people in these two age groups live in rural areas but don't farm.

Second, rural Americans will benefit more than most because fewer of them have private health insurance. It's estimated that only 41 per cent of all farmers and only 47 per cent of nonfarm rural residents over 65 now have private health coverage. In cities some 58 per cent of all people in this older age group are covered. The difference is probably due to the ease with which urban workers can get group health insurance where

they are employed.

1 Employer and employee contribution are the same. 2 Old Age, Survivors, and Disability Insurance.

Medicare is a two-part program: (1) hospital insurance coverage for virtually every American upon reaching 65 whether or not he is eligible for social security benefits or railroad retirement; and (2) voluntary medical insurance for virtually everyone 65 or over who signs up for it to help defray doctors' bills and other medical costs.

Employees of the federal government who are covered under the Federal Employees Health Benefits Program are ineligible for the hospital insurance.

In a new report on this year's changes in the Social Security Act, ERS specialists outline what Medicare will and will not do. They point out that it's a milestone in the nation's social evolution, but it doesn't provide entirely free medical care. Hospital, doctor and other medical fees are not paid in full.

The plans don't become effective until July 1, 1966. Rural families are urged to retain private insurance at least until then. They may also want to continue private coverage indefinitely to supplement Medicare.

Hospital insurance. Medicare's hospital insurance is automatic for all persons 65 or over who are getting social security or railroad retirement. It will be financed by increased social security taxes.

For those persons 65 or over not covered by social security or railroad retirement, the program will be financed from the federal treasury.

Under the hospital plan, the patient will pay the first \$40 of costs in a participating hospital for any *spell of illness*. Medicare will pay all other costs of covered services for 60 days during the spell of illness. For an additional 30 days the patient will pay \$10 a day, Medicare paying for all other costs of covered services.

Thus, a person 65 or older who spends two weeks in a hospital after July 1, 1966, could usually expect to pay only \$40 of the hospital costs; a 70-day stay would

cost him \$140. (These estimates could be a little higher if he received some services which were not covered.)

A spell of illness begins on the first day the patient enters a participating hospital or a qualified nursing home and ends when he has not been a patient in a hospital or nursing home for 60 consecutive days.

The plan also provides for hospital diagnostic services over any 20-day period for patients not actually confined to a hospital. The patient will pay the first \$20 for each such 20-day period, Medicare 80 per cent of the remaining costs.

After a three-day stay or longer in a hospital or after a stay in a participating nursing home, the patient will be entitled under the plan to up to 100 home health care visits during the one-year period beginning with his discharge. These services will include intermittent nursing care, therapy and services of a home health aide on a part-time basis.

Beginning January 1, 1967, Medicare's hospital insurance will also provide for extended care in a qualified nursing home or similar facility. The plan will pay for the first 20 days in a nursing home (following a three-day or longer hospital stay). For another 80 days the patient will pay \$5 a day, Medicare the remaining costs for covered services.

Doctor and medical coverage. Under this voluntary plan, the insured person will pay \$3 a month beginning July 1, 1966. For each person who enrolls, the federal government will match his \$3 payment with a like amount.

The patient will pay the first \$50 each year for doctors' bills or other covered services. Medicare will then pay 80 per cent of the reasonable charges for all other covered services for the remainder of the year.

Thus, after an illness a retired farmer, age 65 or older, might have a bill for doctor and other medical services of \$260. The retiree would pay only \$92; that is, the first \$50 of annual expenses plus \$42 or 20 per cent of expenses over \$50. Of course, once the first \$50 is paid, Medicare will take care of 80 per cent of all subsequent expenses for covered services during the year.

In addition to doctors' and surgeons' charges, covered services include such things as X-rays, oxygen tents, some ambulance service, an additional 100 home health visits without prior hospitalization, and treatment of mental and psychoneurotic disorders outside a hospital.

How to qualify. If you are 65 or over, or will be before January 1, 1966, you will not have to go to your social security office if:

—You are getting social security or railroad retirement benefits.

—You are receiving public assistance payments.

You will be enrolled automatically in the hospital insurance program. You will be notified by mail before December 15 as to how to apply for the voluntary medical insurance for doctors' and related medical costs.

If you will be 65 or over before January 1, 1966, go to your local social security office if:

—You have worked under social security but never applied for benefits.

—You have never worked under social security.

If you will be 65 on or after January 1, 1966, you may enroll in the voluntary medical insurance program during the sevenmenth period beginning three months before the month of your 65th birthday and ending three months after that month. However, to be covered for the month you are 65, you must enroll before the month you are 65.

Use the rules above to determine whether you should visit the social security district office.

Coverage under both plans begins on July 1, 1966. (7)

Other Changes

Aside from Medicare, the 1965 amendments to the Social Security Act include several other provisions that will benefit rural people:

Higher retirement payments. There is a 7 per cent increase in monthly retirement payments retroactive to January 1965. Minimum monthly payments go up from \$40 to \$44 for people 65 or older when they retire. Maximum benefits payable to a family rise from \$254 to \$309.

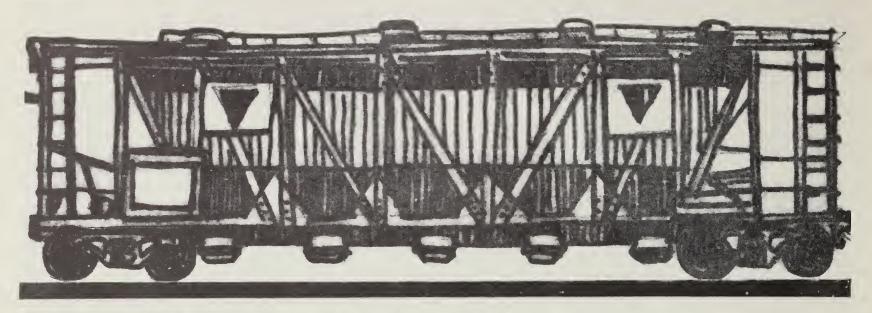
Benefits for uninsured elderly people. Some people over 72 with less than six quarters of social security coverage haven't been eligible for retirement benefits in the past. Under the 1965 amendments, many can now get a basic benefit of \$35 a month.

Benefits for disabled workers. Until this year disabled workers, including farmers, couldn't get benefits unless their illness or injury was expected to last for an indefinite period or to result in death. Now they may be entitled to payments after six months if their disability has lasted or is expected to last a year or longer.

Higher earned income exemption. Starting in 1966 farmers and other retirees can earn \$1,500 each year, compared with \$1,200 previously, and still keep all of their social security benefits. And there's a more liberal allowance for earned income over \$1,500.

Optional way to figure farm income. For the 1965 tax year, farmers with gross incomes of \$600 to \$1,800 can report and get social security credit for twothirds of their gross income (up to \$1,800) even if they do not have a net profit for the year. For tax years beginning after January 1, 1966, a farmer will be able to report two-thirds of his gross income (up to \$2,400) for social security purposes. This provision, which applies only to selfemployed farmers, entitles a farmer to maintain his social security protection at a higher level than would be possible if he could not get any social security credit for years in which he has a net loss or little profit.

Widows' benefits. Widows of insured workers may now get benefits at age 60 if they accept a reduced monthly benefit. (8)



FORMULA FOR FEED MAKERS: BUY BULK

Economic models show feed manufacturers can cut handling and storage costs by buying bulk rather than bagged ingredients. But shifting over from mechanical to pneumatic equipment will up total operating costs.

In the last couple of decades the number of basic formulas handled by the typical feed manufacturer has just about doubled. And the number of ingredients in each formula—including the vitamins, antibiotics, drugs, hormones and such—has grown as rapidly.

The manufacturer has to strain his facilities to handle and store this mushrooming number of feed ingredients. This, along with the overwhelming shift to bulk receipts, has forced the manufacturer to take a closer look at his

receiving operation.

To point the way to major savings in receiving, specialists in ERS have set up two theoretical models for receiving centers in feed mills. One, for a small mill, produces 80 tons of finished feed a day; the other produces 200 tons.

Both large and small plants receive about four-fifths of their grain and other ingredients in bulk form. Key points of comparison are:

Equipment in the small receiving center costs \$64,280. It takes 7 man-hours a day for production and another 1.5 man-hours for supervision. Total annual operating costs for such a receiving center run to \$13,241, or about 64 cents a ton, with labor costs amounting to a third of the total. Equipment for the larger receiving center costs \$101,110, including the cost of installation. Such a setup takes about 14.11 manhours of production labor a day and another 3 man-hours of supervision. Total annual operating costs would be \$25,362, or 50 cents a ton. Labor equals about 26 per cent of the total.

If the smaller model is put on a two-shift day, its operating costs drop to the level of the larger mill. But, if the bigger mill is also put on a two-shift day, operating costs drop to roughly fourfifths of the smaller model operating on the same schedule.

There are definite savings in bulk versus bagged materials handling. If models received 50 per cent bulk material instead of 80 per cent, the per ton cost would increase 3 per cent for the smaller one, 6 per cent for the larger. Receiving 100 per cent bulk, the smaller model's costs would be reduced by 5 per cent; the larger one's by 6 per cent.

Labor costs are primarily responsible for these changes. The savings reflect more efficient bulk handling and fuller utilization of existing equipment. Increased use of lower cost bulk ingredients also increases savings to the feed plant.

With pneumatic conveyors instead of mechanical equipment in the models, the specialists were able to cut equipment costs for the smaller model by 15 per cent. But the added labor, depreciation and electricity pushed costs above the level for mechanical equipment.

Roughly the same relation existed for the larger plant: slightly lower initial cost of the pneumatic system, higher total costs.

Feed manufacturers can pare down handling costs for ingredients, even when they come in bagged. For example, bag handling clamps on forklifts could save as much as \$450 a year for a mill storing an average of 400 tons of material on pallets. Over the long run savings would be even greater, with the elimination of maintenance expenses for pallets and some labor costs. (9)

Somewhat Higher Wages, Corporate Profits Mark Food Marketing Year

At \$48.2 billion, the food marketing bill this year is running about \$1 billion more than in 1964. One reason is that more food is being marketed. Another is that we're eating out more, and much of the price we pay for meals in restaurants is for preparation and service—both part of the marketing bill.

Wage rates have continued to mount in food marketing as they have in most industries. However, improvements in labor productivity may have kept unit labor costs from rising.

For food marketing as a whole, employees in August of this year (last available figures) earned an average of \$2.29 an hour, 6 cents

What's New In Marketing Research

ERS specialists note innovations in unrelated fields that have been put to imaginative use by the food or food-related industries.

—The new greaseless, easy care coating on cooking utensils was actually developed as a heat retardant for ballistic missiles.

—Soundwaves adapted from military radar and sonar are used by food processors to settle the bulky contents of packages. Corn flakes are an example. The method permits the manufacturer to completely fill the package and should do away with consumers' complaints about "half-empty" boxes.

—Aerosol containers were developed first to spray insecticides. The food industry is now using them to dispense such things as whipped cream and cheese spread.

Researchers say this is only the beginning. Today's space program is calling for new design concepts in metals, fabrics, foods, communications, photography, propulsion and countless other areas. Many of these innovations will undoubtedly find their way into consumer goods in the next decade or so. (11)

more than in August 1964.

Earnings in the various segments of the industry varied considerably above and below the \$2.29 industry average. For example, workers in food manufacturing got \$2.41 an hour, 5 cents more than in August last year. But this was 19 cents less than the average for all manufacturing, that is, the average for automobile, steel, chemical and other manufacturing workers in the economy.

As in food manufacturing, workers in food wholesaling earned on the average \$2.41 an hour in August this year. And again, comparing food workers with the rest of the wholesale trade shows them earning 19 cents an hour less than the average.

Employees of retail food stores had the lowest earnings of the various food groups—\$2.03 an hour. But the comparison with retailing as a whole was favorable to the food workers. For all types of retail stores, employees averaged only \$1.95 an hour.

Profits after taxes of leading food manufacturing firms in the first half of 1965 averaged 2.5 per cent of sales. They were 2.3 per cent a year earlier. After-tax profits averaged 10.3 per cent of stockholders' equity in the first half. By comparison, they were 9.2 per cent in the first six months of 1964.

For a group of leading companies that manufacture food, profits as a per cent of stockholders' equity rose from 10.5 per cent in 1963 to 11.3 per cent in 1964; profits as a per cent of sales increased from 2.5 per cent to 2.7 per cent. Profits increased in each group of food manufacturers except canning and miscellaneous food companies.

In 1964, for the eighth straight year, profits of eight leading retail food chains averaged 1.2 per cent of sales; profits as a per cent of stockholders' equity declined from 14.2 per cent in 1957 to 10.7 per cent in 1964. (10)

MORE MEAT FROM MORE PLANTS: There's more meat being produced these daysmore cattle and hogs to supply more meat for more people. And our livestock is being slaughtered by a greater number of firms. Biggest increase in production and slaughter was for cattle, up more than 50 per cent between 1950 and 1962. Slaughter of calves, however, dropped by 25 per cent as calves were either fattened or held to increase breeding herds. The proportion of federally inspected slaughter went up at a faster rate than total commercial slaughter; it declined at a slower rate when the total went down. There were more firms in the slaughter business in 1962 than in 1950, but the increase was entirely in the firms handling cattle. However, the business was spread out among more firms for all types of slaughter. The four largest firms handled a smaller share of the volume at the end of the period. (12)

	1			
Year	Total slaughter	Federally inspected	Share of total slaughter by four largest firms	
	Million head	Per cent		
1950	17.9	73	52	
1954	25.0	74	45	
1958	23.6	75	36	
1962	26.1	77	30	
1950	10.0	59	58	
1954	12.7	60	59	
1958	9.3	61	50	
1962	7.5	66	40	
1950	12.9	91	70	
1954	15.9	89	69	
1958	14.2	~ 88	64	
1962	16.8	84	60	
1950	69.5	82	49	
1954	64.8	82	48	
1958	71.0	84	41	
1962	79.3	85	39	

Food Prices and Spending Up in '65; Smaller Increase Seen for Next Year

With disposable incomes up over 5 per cent per person and food prices running 2 per cent above 1964, per capita food expenditures are up nearly 5 per cent this year.

The average last year was \$420; this year, \$439. With disposable income up slightly more than food expenditures, the percentage of income being spent on food is declining fractionally from last year's 18.5 per cent.

Family food expenditures (excluding alcoholic beverages) are estimated at \$1,469 this year. This averages about \$28 a week. But food expenditures per capita vary widely with family size, income and other characteristics. For example, food expenditures per person are twice as large for two-person families as for families of six or more. By family size, estimated food expenditures in 1965 are as follows:

		Per family	
	Dollars		
Single consumers	675	675	
Family of 2	570	1,140	
Family of 3	486	1,458	
Family of 4	427	1,708	
Family of 5	378	1,890	
6 or more	285	1,995	
Average, includ- ing singles Average family, 2 or more	439	1,405	
persons	397	1,469	

Single consumers are spending an estimated \$13 a week for food. For a family of two, the average is \$22; three, \$28; four \$33; five, \$36; six or more, \$38. The average for all families, including single consumers, is \$27; excluding single consumers, \$28.

Food spending is expected to rise again in 1966, though not as much as this year. Consumers will buy more built-in maid services with their food as their disposable incomes continue to gain.

And they'll eat out more often. But food prices probably won't increase as much as they did this year. Prices of potatoes, fresh vegetables, citrus and poultry are expected to recede from this year's levels.

Meat prices are expected to average higher, based on the expected decline in per capita supplies. Prices of many canned fruits and vegetables may also increase. (13)

Per Capita Food Consumption Figures Show Drop of 200 Pounds Since '09

When's the last time you plucked a chicken? Churned butter? Shelled peas? Made your own mayonnaise?

There are a couple of generations of Americans alive today who've seldom, if ever, done any of these things.

Today, because so much processing takes place outside the home, much of the waste material has been eliminated from foods before they reach our shopping carts. And, thanks to canning, freezing and other forms of preservation, we waste less food in home storage.

One result of less wastage is that figures on annual food consumption indicate a drop of 200 pounds per person over the last 50 years. But consumption is measured in pounds sold at retail. and what we buy today is much more nearly what we actually consume than what we bought a halfcentury ago. So, figures now jibe much more closely with what actually appears on American tables.

Processing is not all of the story, however. Our diets also figure in the 200-pound drop. We're averaging an estimated 400 fewer calories daily. We're eating somewhat less and we've changed the kinds of foods we eat. For example, consumption of meat, poultry and fish is up; bulky, starchy foods have lost ground. (14)

Average Egg Use Per Person Slides As Coffee Break Replaces Breakfast

A cup of coffee "to get the heart started." An occasional glass of orange juice for nutrition's sake. This is the extent of breakfast for many a modern American adult. Others skip breakfast entirely and rely on the office coffee break.

One result of all this rushing off to work is a steady decline in egg consumption since the early 1950s. We averaged 393 eggs apiece in 1951; we're expected to be down to 307 when the 1965 tally is in.

Most fresh eggs are eaten at breakfast. Homemakers also add them to cake mixes and "fromscratch" recipes for other meals. A few eggs—an average of 29 in 1962-64—are consumed in processed form.

Price isn't behind the decline in consumption. There has been a 27 per cent cut in the retail price of Grade A large eggs since the early 1950s. Per capita disposable income during the same period rose 53 per cent and retail food prices in general went up 12 per cent.

The problem is the pace.

About one-third of all wives are now working outside the home. This has discouraged home baking, large breakfasts and encouraged use of prepared cereals.

Fewer people are now engaged in strenuous work and so fewer feel the need for big breakfasts.

Other probable factors in the egg's decline: calorie *miscounting* and vanishing backyard flocks. Some people think they can lose weight by skipping breakfast or trimming it to a cup of black coffee. (They'd do better to cut down on lunch or supper.) Families who produce their own eggs consume larger quantities than families in similar economic circumstances who must buy them—and few people keep just a dozen hens anymore. (15)

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recent publications

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ECONOMIES OF SCALE IN TURKEY HATCHERIES. J. R. Pedersen, Marketing Economics Division. MRR-719.

The objective of this study is to provide in-plant efficiency and cost information on turkey hatcheries useful to hatchery managers and owners. This is achieved by: (1) examining the costs of a sample of actual turkey hatcheries and (2) synthesizing cost information for six model turkey hatcheries of different sizes. (See July 1965 Farm Index.)

FROZEN FOODS—MARGINS, COSTS, AND RETURNS IN RELATION TO DISPLAY SPACE. L. E. Ott, Marketing Economics Division. ERS-235.

The purpose of this study was to determine the relation of display space for frozen foods to their costs, margins and returns. It is one of a number of studies to evaluate the retail pricing and merchandising practices for farm products and to point up opportunities for expanding markets. (See October 1965 Farm Index.)

GEOGRAPHIC STRUCTURE OF MILK PRICES 1964-65. F. A. Lasly, Marketing Economics Division. ERS-258.

Dealers pay more for fluid milk as the distance from the source increases. Improved transportation technology has lowered the cost of transporting the milk. These two elements, moving in opposite directions, have been offsetting each other for several years.

THE 1962 FEED GRAIN PROGRAM IN THE CENTRAL COASTAL PLAIN OF NORTH CAROLINA. D. O. Aines, Farm Production Economics Division, in cooperation with the University of North Carolina, Raleigh. Univ. A.E. Info. Series No. 118.

The farms of participants in the 1962 Feed Grain Program were larger and had larger feed grain bases, higher normal yields and a greater proportion of cash crop-type farms than nonparticipants. These differences were revealed by a study of a sample of 142 farms in the Central Coastal Plain of North Carolina.

Numbers in parentheses at end of stories refer to sources listed below:

1. H. H. Beaty, G. C. Shove and V. W. Davis, Drying Shelled Corn, Ill. Agr. Expt. Sta. (P*); 2. N. J. Wall, The Balance Sheet of Agriculture, 1965, Agr. Info. Bul. 290 (P); 3. W. C. Edwards (SM); 4. R. L. Anderson and L. M. Hartman, Introduction of Supplemental Irrigation Water: Agricultural Response to an Increased Water Supply in Northeast Colorado, Colo. Agr. Expt. Sta., T. B. 76 (P*); 5. Farm Income State Estimates, 1949-64, FIS-199. Supplement (P); 6. H. G. Sitler, Costs of Selected Sizes and Types of Farm Machinery on Colorado Wheat Farms, Colo. Agr. Expt. Sta. Unnumb. (P*); 7. & 8. L. A. Jones and E. I. Reinsel, Social Security Amendments of 1965: Importance to Farm and Rural People, ERS-257 (P); 9. C. J. Vosloh, Jr.,

Ingredient Handling by Feed Manufacturers—Capital and Labor Requirements, MRR-727 (P); 10. Marketing and Transportation Situation, MTS-159 (P); 11. H. H. Harp and R. Hall (SM); 12. W. E. Anthony, Structural Changes in the Federally Inspected Livestock Slaughter Industry, 1950-62, AER-83 (P); 13. National Food Situation, NFS-114 (P); 14. S. J. Hiemstra (SM); 15. Poultry and Egg Situation, PES-238 (P); 16. E. Hodges, Supplement for 1965 to Livestock-Feed Relationships, 1909-1964, Statis. Bul. 337 (P). Speech (S); published report (P); unpublished manuscript (M);

Speech (S); published report (P); unpublished manuscript (M); special material (SM); *State publications may be obtained only by writing to the experiment station or university cited.

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The Other Consumers

Basic diet for the nation's milk cows last year was 26 million tons of concentrate feeds. In addition, the animals consumed 119 million tons of hay and other harvested forages to fill out the empty spaces. Bulk of the concentrates fed was corn and other grains.

The nation's hogs lived up to their reputation when it came to putting away the corn. The animals ate nearly 40 million tons of corn last year plus 11 million tons of other concentrates.

Cattle in the nation's feedlots ate 21 million tons of concentrates last year and downed another 22 million tons of roughages. The rest of the beef cattle population consumed 8 million tons of concentrates, 60 million tons of roughages.

Though broilers consumed only 10 million tons of concentrates and no roughages, they consumed almost as much high protein concentrate as the hogs, with 3.07 million tons for the broilers, 3.16 million tons for the hogs.

All together, the nation's farm animals ate 153 million tons of concentrates last year along with 238 million tons of roughages. They consumed 89 million tons of corn, 12 million tons of sorghum grains, 22 million tons of other grains, 17 million tons of high protein concentrates and 13 million tons of such other by-product feeds as wheat and rice millfeeds, seeds and skim milk.

Also, the roughage diet included 120 million tons of hay and about the same amount of other harvested forages such as straw, silage and beet pulp. (16)

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